WHAT IS CLAIMED IS:

1. A cartridge assembly of a water cooled radiator for cooling a central processor in a computer, comprising:

a shell (10) with a face panel (102) of dimensions that can fit into a 5.25" drive bay of the computer front panel for easy installation into the computer;

a water tank (20) for holding water and being installed behind the face panel (102) inside the shell (10), wherein the water tank (20) has a plug (22) that can be removed for refilling the water tank with water;

a booster pump (30) being installed behind the water tank (20) inside the shell (10) for boosting water pressure, with piping (32) interconnecting between the booster pump (30) and water tank (20); wherein

the cartridge assembly being connected by the circulation piping (32) into a casing of the computer to form an intake pipe (34) and a return pipe (36), wherein the intake pipe (34) is for directing inflow water between the booster pump (30) and the central processor, and the return pipe (36) is for directing return water between the water tank (20) and the central processor.

2. The cartridge assembly as claimed in claim 1, wherein the face panel (102) of the cartridge assembly has a transparent window (14) for visually monitoring of a water level in the water tank (20).

3. The cartridge assembly as claimed in claim 1, wherein the face panel (102) has a push button (104) with back end fixed to the front wall of the water tank (20), and two handles (12) are respectively mounted on two sides of the face panel (102), each handle (12) having an angular bend.

4. The cartridge assembly as claimed in claim 1, wherein the cartridge

assembly has a lock-and-release mechanism to manage the refilling of the water tank (20), by means of four first springs (122), a second spring (134), an anchoring plate (13), and a catch box (202), wherein

each first spring (122) is mounted on a respective one of four legs at the back end of each handle (12) connecting between the end of the handle (12) and the water tank (20);

the anchoring plate (13) having a column (132) in the center is fixed on the shell wall using the bottom portion for mounting the second spring (134);

the second spring (134) is mounted between the column (132) of the anchoring plate (13) and the back wall of the water tank (20); and

the catch box (202) is fixed on the shell wall by using the bottom portion, and the catch box (202) has a front opening corresponding to the position of a protruding rod (204) fixed on the back wall of the water tank (20), the protruding rod (204) having a ball at a far end of the protruding rod (204).

5. The cartridge assembly as claimed in claim 2, wherein the cartridge assembly has a lock-and-release mechanism to manage the refilling of the water tank (20), by means of four first springs (122), a second spring (134), an anchoring plate (13), and a catch box (202), wherein

each first spring (122) is mounted on a respective one of four legs at a back end of each handle (12) connecting between the handle (12) and the water tank (20);

the anchoring plate (13) having a column (132) in the center, the column (132) fixed on the shell wall using the bottom portion thereof for mounting the second spring (134);

the second spring (134) is mounted between the column (132) of the anchoring plate (13) and the water tank (20); and

the catch box (202) is fixed on the shell wall by using the bottom portion, and the catch box (202) has a front opening corresponding to the position of a protruding rod (204) fixed on the back wall of the water tank (20), the protruding rod (204) having a ball at a far end of the protruding rod (204).

6. The cartridge assembly as claimed in claim 3, wherein the cartridge assembly has a lock-and-release mechanism to manage the refilling of the water tank (20), by means of four first springs (122), a second spring (134), an anchoring plate (13), and a catch box (202), wherein

each first spring (122) is mounted on a respective one of four legs at the back end of each handle (12) connecting between the end of the handle (12) and the water tank (20);

the anchoring plate (13) having a column (132) in the center of the anchoring plate, wherein the column (132) is fixed on the shell wall using the bottom portion for mounting the second spring (134);

the second spring (134) is mounted between the column (132) of the anchoring plate (13) and the back wall of the water tank (20); and

the catch box (202) is fixed on the shell wall using the bottom portion, and the catch box (202) has a front opening corresponding to the position of a protruding rod (204) fixed on the back wall of the water tank (20), the protruding rod (204) having a ball at a far end of the protruding rod (204).